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1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/042,417A

DATE: 07/09/2003 TIME: 09:07:02

Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

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3 <110> APPLICANT: Pagano, M.
     5 <120> TITLE OF INVENTION: METHODS TO IDENTIFY COMPOUNDS USEFUL FOR THE TREATMENT OF
PROLIFERATIVE
             AND DIFFERENTIATIVE DISORDERS
     8 <130> FILE REFERENCE: 5914-090-999
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/042,417A
    11 <141> CURRENT FILING DATE: 2002-01-07
    13 <150> PRIOR APPLICATION NUMBER: 60/260,179
    14 <151> PRIOR FILING DATE: 2001-01-05
    16 <160> NUMBER OF SEQ ID NOS: 92
    18 <170> SOFTWARE: PatentIn Ver. 2.0
    20 <210> SEQ ID NO: 1
    21 <211> LENGTH: 2151
    22 <212> TYPE: DNA
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    23 <213> ORGANISM: Homo sapiens
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Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

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54 gatgacacaa teeteatetg ggaetteeta aatgateeag etgeecaage tgaaceeece 1740
55 cqttcccctt ctcqaacata cacctacatc tccaqataaa taaccataca ctgacctcat 1800
56 acttgcccag gacccattaa agttgcggta tttaacgtat ctgccaatac caggatgagc 1860
57 aacaacagta acaatcaaac tactgcccag tttccctgga ctagccgagg agcagggctt 1920
58 tgagactcct gttgggacac agttggtctg cagtcggccc aggacggtct actcagcaca 1980
59 actgactgct tcagtgctgc tatcagaaga tgtcttctat caattgtgaa tgattggaac 2040
60 ttttaaacct eccetectet ecteetttea ectetgeace tagtttttte ecattggtte 2100
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64 <211> LENGTH: 569
65 <212> TYPE: PRT
66 <213> ORGANISM: Homo sapiens
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72 Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly Glu Pro Pro Arg Lys
75 Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr Tyr Asn Ser Cys Ala
                                40
78 Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu Ala Ser Thr Ala Met
                            55
81 Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu Ala Asn Gly Thr Ser
                        70
84 Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser Ala Ser Tyr Glu Lys
                   85
87 Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln Trp Ser Glu Ser Asp
                                   105
               100
91 Gln Val Glu Phe Val Glu His Leu Ile Ser Gln Met Cys His Tyr Gln
                               120
          115
94 His Gly His Ile Asn Ser Tyr Leu Lys Pro Met Leu Gln Arg Asp Phe
                           135
97 Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His Ile Ala Glu Asn Ile
                       150
                                           155
100 Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala Ala Glu Leu Val Cys
                    165
                                        170
103 Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met Leu Trp Lys Lys Leu
                                 " 185
               180
106 Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp Arg Gly Leu Ala Glu
           195
                                200
109 Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn Lys Pro Pro Asp Gly
       210 .
                            215
                                                220
112 Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu Tyr Pro Lys Ile Ile
                        230
                                            235
115 Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg Cys Gly Arg His Ser
                                        250
                    245
118 Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser Lys Gly Val Tyr Cys
121 Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly Leu Arg Asp Asn Thr
122
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                                280
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Input Set : N:\EBONY'S\042417A.txt
Output Set: N:\CRF4\07092003\J042417A.raw

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124 Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys Lys Arg Ile Leu Thr
125
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                            295
127 Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr Asp Glu Arg Val Ile
128 305
                        310
130 Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val Trp Asp Val Asn Thr
                    325
                                        330
133 Gly Glu Met Leu Asn Thr Leu Ile His His Cys Glu Ala Val Leu His
                340
                                    345
136 Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys Ser Lys Asp Arg Ser
                                360
139 Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp Ile Thr Leu Arg Arg
                            375
                                                380
        370
142 Val Leu Val Gly His Arg Ala Ala Val Asn Val Val Asp Phe Asp Asp
                                            395
145 Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr Ile Lys Val Trp Asn
                                        410
                    405
148 Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn Gly His Lys Arg Gly
149
                420
                                    425
151 Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val Val Ser Gly Ser Ser
            435
                                440
154 Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys Gly Ala Cys Leu Arg
                           455
157 Val Leu Glu Gly His Glu Glu Leu Val Arg Cys Ile Arg Phe Asp Asn
                        470
                                            475
160 Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys Ile Lys Val Trp Asp
                    485
                                        490
163 Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala Gly Thr Leu Cys Leu
                500
                                    505
166 Arg Thr Leu Val Glu His Ser Gly Arg Val Phe Arg Leu Gln Phe Asp
                                520
            515
169 Glu Phe Gln Ile Val Ser Ser His Asp Asp Thr Ile Leu Ile Trp
                            535
                                                540
172 Asp Phe Leu Asn Asp Pro Ala Ala Gln Ala Glu Pro Pro Arg Ser Pro
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                        550
175 Ser Arg Thr Tyr Thr Tyr Ile Ser Arg
179 <210> SEQ ID NO: 3
180 <211> LENGTH: 1476
181 <212> TYPE: DNA
182 <213> ORGANISM: Homo sapiens
184 <400> SEQUENCE: 3
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186 acggacttgc agaaaaatga aactctggat cacctgatta gtctgagtgg ggcagtccag 120
187 ctcaggcatc tctccaataa cctagagact ctcctcaagc gggacttcct caaactcctt 180
188 cccctggage teagttttta tttgttaaaa tggctegate eteagaettt acteacatge 240
189 tgcctcgtct ctaaacagtg gaataaggtg ataagtgcct gtacagaggt gtggcagact 300
190 gcatgtaaaa atttgggctg gcagatagat gattctgttc aggacgcttt gcactggaag 360
191 aaggtttatt tgaaggctat tttgagaatg aagcaactgg aggaccatga agcctttgaa 420
192 accteqteat taattqqaca caqtqeeaqa qtqtatqcac tttactacaa agatqqactt 480
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Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

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193 ctctgtacag ggtcagatga cttgtctgca aagctgtggg atgtgagcac agggcagtgc 540
194 gtttatggca tccagaccca cacttgtgca gcggtgaagt ttgatgaaca gaagcttgtg 600
195 acaggeteet ttgacaacae tgtggettge tgggaatgga gtteeggage eaggaeecag 660
196 cactttcggg ggcacacggg ggcggtattt agcgtggact acaatgatga actggatatc 720
197 ttggtgagcg gctctgcaga cttcactgtg aaagtatggg ctttatctgc tgggacatgc 780
198 ctgaacacac tcaccgggca cacggaatgg gtcaccaagg tagttttgca gaagtgcaaa 840
199 gtcaagtctc tcttgcacag tcctggagac tacatcctct taagtgcaga caaatatgag 900
200 attaagattt ggccaattgg gagagaaatc aactgtaagt gcttaaagac attgtctgtc 960
201 tctgaggata gaagtatctg cctgcagcca agacttcatt ttgatggcaa atacattgtc 1020
202 tgtagttcag cacttggtct ctaccagtgg gactttgcca gttatgatat tctcagggtc 1080
203 atcaagactc ctgagatagc aaacttggcc ttgcttggct ttggagatat ctttgccctg 1140
204 ctgtttgaca accgctacct gtacatcatg gacttgcgga cagagagcct gattagtcgc 1200
205 tggcctctgc cagagtacag ggaatcaaag agaggctcaa gcttcctggc aggcgaacat 1260
206 cctggctgaa tggactggat gggcacaatg acacgggctt ggtctttgcc accagcatgc 1320
207 ctgaccacag tattcacctg gtgttgtgga aggagcacgg ctgacaccat gagccaccac 1380
208 cgctgactga ctttgggtgc cggggctgcg ggttttgggt gcacctctgc ggcacgcgac 1440
209 tgcatgaacc aaagttctca cctaatggta tcatca
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212 <211> LENGTH: 422
213 <212> TYPE: PRT
214 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 4
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220 Phe Leu Ser Leu Thr Asp Leu Gln Lys Asn Glu Thr Leu Asp His Leu
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223 Ile Ser Leu Ser Gly Ala Val Gln Leu Arg His Leu Ser Asn Asn Leu
                                 40
226 Glu Thr Leu Leu Lys Arg Asp Phe Leu Lys Leu Leu Pro Leu Glu Leu
                             55
229 Ser Phe Tyr Leu Leu Lys Trp Leu Asp Pro Gln Thr Leu Leu Thr Cys
230 65
232 Cys Leu Val Ser Lys Gln Trp Asn Lys Val Ile Ser Ala Cys Thr Glu
                                         90
235 Val Trp Gln Thr Ala Cys Lys Asn Leu Gly Trp Gln Ile Asp Asp Ser
                                    105
238 Val Gln Asp Ala Leu His Trp Lys Lys Val Tyr Leu Lys Ala Ile Leu
           115
                                120
                                                    125
241 Arg Met Lys Gln Leu Glu Asp His Glu Ala Phe Glu Thr Ser Ser Leu
       130
                            135
244 Ile Gly His Ser Ala Arg Val Tyr Ala Leu Tyr Tyr Lys Asp Gly Leu
245 145
                        150
                                            155
247 Leu Cys Thr Gly Ser Asp Asp Leu Ser Ala Lys Leu Trp Asp Val Ser
                    165
                                        170
250 Thr Gly Gln Cys Val Tyr Gly Ile Gln Thr His Thr Cys Ala Ala Val
251
                                    185
253 Lys Phe Asp Glu Gln Lys Leu Val Thr Gly Ser Phe Asp Asn Thr Val
                                200
                                                    205
           195
256 Ala Cys Trp Glu Trp Ser Ser Gly Ala Arg Thr Gln His Phe Arg Gly
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Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

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210
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259 His Thr Gly Ala Val Phe Ser Val Asp Tyr Asn Asp Glu Leu Asp Ile
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                                            235
262 Leu Val Ser Gly Ser Ala Asp Phe Thr Val Lys Val Trp Ala Leu Ser
                                        250
                    245
265 Ala Gly Thr Cys Leu Asn Thr Leu Thr Gly His Thr Glu Trp Val Thr
                260
                                    265
268 Lys Val Val Leu Gln Lys Cys Lys Val Lys Ser Leu Leu His Ser Pro
                                                    .285
           275
                                280
271 Gly Asp Tyr Ile Leu Leu Ser Ala Asp Lys Tyr Glu Ile Lys Ile Trp
                            295
       290
275 Pro Ile Gly Arg Glu Ile Asn Cys Lys Cys Leu Lys Thr Leu Ser Val
                        310
                                            315
278 Ser Glu Asp Arg Ser Ile Cys Leu Gln Pro Arg Leu His Phe Asp Gly
                                        330
279
                    325
281 Lys Tyr Ile Val Cys Ser Ser Ala Leu Gly Leu Tyr Glm Trp Asp Phe
282
284 Ala Ser Tyr Asp Ile Leu Arg Val Ile Lys Thr Pro Glu Ile Ala Asn
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                                360
                                                    365
287 Leu Ala Leu Leu Gly Phe Gly Asp Ile Phe Ala Leu Leu Phe Asp Asn
                            375
                                                380
290 Arg Tyr Leu Tyr Ile Met Asp Leu Arg Thr Glu Ser Leu Ile Ser Arg
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293 Trp Pro Leu Pro Glu Tyr Arg Glu Ser Lys Arg Gly Ser Ser Phe Leu
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296 Ala Gly Glu His Pro Gly
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300 <210> SEQ ID NO: 5
301 <211> LENGTH: 1407
302 <212> TYPE: DNA
303 <213> ORGANISM: Homo sapiens
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307 gtgaccgtaa ttcatcagaa gaaggaactg cagagaaatc caagaaactg aggactacaa 120
308 atgagcatte teagaettgt gattggggta ateteettea ggacattatt eteeaagtat 180
309 ttaaatattt qcctcttctt qaccqqqctc atgcttcaca agtttgccgc aactggaacc 240
310 aggtatttca catgcctgac ttgtggagat gttttgaatt tgaactgaat cagccagcta 300
311 catcttattt gaaagctacc catccagagc tgatcaaaca gattattaaa agacattcaa 360
312 accatctaca atatgtcagc ttcaaggtgg acagcagcaa ggaatcagct gaagcagctt 420
313 gtgatatact atcgcaactt gtgaattgct ctttaaaaac acttggactt atttcaactg 480
314 ctcgaccaag ctttatggat ttaccaaagt ctcactttat ctctgcactg acagttgtgt 540
315 togtaaacto caaatoootg tottogotta agatagatga tactocagta gatgatooat 600
316 ctctcaaagt actagtggcc aacaatagtg atacactcaa gctgttgaaa atgagcagct 660
317 gtcctcatgt ctctccagca ggtatccttt gtgtggctga tcagtgtcac ggcttaagag 720
318 aactaqccct gaactaccac ttattgagtg atgagttgtt acttgcattg tcttctgaaa 780
319 aacatqttcg attagaacat ttgcgcattg atgtagtcag tgagaatcct ggacagacac 840
320 acttccatac tattcagaag agtagctggg atgctttcat cagacattca cccaaagtga 900
321 acttaqtqat qtattttttt ttatatqaaq aagaatttga ccccttcttt cgctatgaaa 960
322 tacctqccac ccatctqtac tttqqqaqat caqtaagcaa agatgtgctt ggccgtgtgg 1020
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RAW SEQUENCE LISTING ERROR SUMMARY

PATENT APPLICATION: US/10/042,417A TIME: 09:07:03

DATE: 07/09/2003

Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:26; Xaa Pos. 218,556,630

Seq#:29; N Pos. 13,47,68,88,270

Seg#:30; Xaa Pos. 15,22,28,89

Seq#:37; N Pos. 45,329,332

Seq#:38; Xaa Pos. 110,111

Seq#:51; N Pos. 1733

Seq#:52; Xaa Pos. 576,586

Seq#:53; N Pos. 348

Seq#:54; Xaa Pos. 150,309,340,374

Seq#:59; N Pos. 471